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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/430,877	11/01/1999	JEFFREY A. MORGAN	10981028-1	7874

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IP ADMINISTRATION
LEGAL DEPARTMENT 20BN
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EXAMINER	
GROSS, KENNETH A	

ART UNIT	PAPER NUMBER
2122	6

DATE MAILED: 04/08/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

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Office Action Summary	Application No.	Applicant(s)	
	09/430,877	MORGAN, JEFFREY A.	
	Examiner	Art Unit	
	Kenneth A Gross	2122	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____ .

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) 1-12 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) 1-12 is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☒ The proposed drawing correction filed on 1/16/03 is: a)☒ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

1. This action is in response to the amendment filed on January 16th, 2003.

2. The 35 U.S.C. 102(b) rejection of Claim 10 is withdrawn.

3. Claims 1-9, 11, and 12 remain rejected under 35 U.S.C. 103(a). Claim 10 is now rejected under 35 U.S.C. 103(a).

4. The corrected or substitute drawings were received on January 16th, 2003. These drawings are approved.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6. Claims 1, 2, 4-7, and 9-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Narasimhan et al. (U.S. Patent Number 6,446,192) in view of Breslau et al. (U.S. Patent Number 5,761,512).

In regard to Claim 1, Narasimhan teaches a method of providing an embedded web server for a device (column 2, lines 46-50) having custom-built virtual machine software (Column 3, lines 43-66), where the web server is application specific. "The compiled applet is then programmed into the network interface memory chip" creating a "customized network interface chip" (Column 9, lines 6-9). Narasimhan further teaches libraries that can be used to build the customized network interface chip (Column 9, lines 4-6, lines 46-49). These libraries are

separated into categories, such as "Graphics" and "Communications" and are used by the compiler at compile time to form an application-specific web server. Narasimhan does not teach the collection of application-specific classes in a library that the compiler chooses at compile time. Breslau, however, teaches a method of compiling an object from one class in a library, where each class allows the object to operate in a different execution environment (Column 1, lines 56-67), where in the abstract, environments include "processors, operating systems, user interfaces, and software resources." Breslau teaches a collection of server classes, which can be interpreted as a library (Column 1, lines 39-44). Although Breslau does not specifically teach web server and virtual machine class libraries, he does teach application-specific libraries used to compile programs for client-server capabilities. Furthermore, Narasimhan does teach building a device with web server and virtual machine capabilities using libraries, so it would have been obvious that these libraries are application-specific, meaning separate libraries for both the web server and virtual machine functionalities of the device. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to provide a web server for a device taught by Narasimhan, and using the classes mentioned to build this server, compile the server with an application-specific class library taught by Breslau, to create an application-specific web server, since the library taught by Breslau allows for quicker and more organized development. Claim 6 is a system step that corresponds with claim 1, and is rejected for the same reasons as claim 1.

In regard to Claim 2, Breslau teaches parsing the library of classes (Figure 3, item 31) in order to select the class that corresponds to the application (Figure 3, items 53 and 59).

In regard to Claim 10, Narasimhan teaches: (A) that the client-side of the device can run a multitude of web applications, including "Netscape Navigator and Microsoft Internet Explorer" which run customized HTML or Java Applet software (Column 8, lines 55-57); (B) an embedded web server for a device (column 2, lines 46-50) having custom-built virtual machine software (Column 3, lines 43-66). Narasimhan further teaches libraries that can be used to build the customized network interface chip (Column 9, lines 4-6, lines 46-49). These libraries are separated into categories, such as "Graphics" and "Communications" and are used by the compiler at compile time to form an application-specific web server. Narasimhan does not teach the collection of application-specific classes in a library that the compiler chooses at compile time. Breslau, however, teaches a method of compiling an object from one class in a library, where each class allows the object to operate in a different execution environment (Column 1, lines 56-67), where in the abstract, environments include "processors, operating systems, user interfaces, and software resources." Breslau teaches a collection of server classes, which can be interpreted as a library (Column 1, lines 39-44). Although Breslau does not specifically teach web server and virtual machine class libraries, he does teach application-specific libraries used to compile programs for client-server capabilities. Furthermore, Narasimhan does teach building a device with web server and virtual machine capabilities using libraries, so it would have been obvious that these libraries are application-specific, meaning separate libraries for both the web server and virtual machine functionalities of the device. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to provide a web server for a device comprising a web application, an application-specific web server, and an application specific virtual machine taught by Narasimhan, and using the classes mentioned to build this server,

compile the server with an application-specific class library taught by Breslau, to create an application-specific web server, since the library taught by Breslau allows for quicker and more organized development.

In regard to Claims 4, 5, 7, 9, 11, and 12, for specific rejections of Claims 4, 5, 7, 9, 11, and 12, see the office action filed on October 10th, 2002 (paper number 2).

7. Claims 3 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Narasimhan (U.S. Patent Number 6,446,192) in view of Breslau (U.S. Patent Number 5,761,512) and further in view of Madany (U.S. Patent Number 6,199,196).

In regard to Claims 3 and 8, for specific rejections of Claims 3 and 8, see the office action filed on October 10th, 2002 (paper number 2).

Conclusion

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kenneth A Gross whose telephone number is (703) 305-0542. The examiner can normally be reached on Mon-Fri 7:30-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gregory A Morse can be reached on (703) 308-4789. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 746-7239 for regular communications and (703) 746-7240 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

KAG
March 18, 2003

GREGORY MORSE
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100